

11 sealingly engage when said first and second main tubulars are brought together down hole.

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~~22~~ The connection of claim ~~21~~¹, wherein:

2 said first and second main tubulars sealingly engage by being pushed together.

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~~23~~ The connection of claim ~~21~~¹, wherein:

2 said first and second auxiliary conduits are sealingly engaged by being pushed together.

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~~24~~ The connection of claim ~~21~~¹, wherein:

2 said first and second auxiliary conduits are brought into alignment as a result of advancing

3 said second main tubular toward said first main tubular.

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~~25~~ The connection of claim ~~24~~⁴ further comprising:

2 alignment devices on said first and second main tubulars which, upon engagement, due to
3 advancing said second main tubular toward said first main tubular, can rotate one main tubular with
4 respect to the other so as to align said first and second auxiliary conduits before such auxiliary
5 conduits make sealing contact.

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~~26~~ The connection of claim ~~25~~¹ further comprising:

2 a locking device engageable as a result of bringing together said main tubulars to hold said
3 auxiliary conduits selectively locked to each other.

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1 ~~27~~ The connection of claim ~~26~~, wherein:

2 said first and second auxiliary conduits are respectively mounted externally to said first and
3 second main tubulars;

4 said second auxiliary conduit comprises a housing having a passage therethrough, said
5 housing selectively engageable to said second main tubular before said main tubulars are brought
6 together;

7 said locking device further comprises a locking member which extends from said housing
8 and is selectively engageable to said first main tubular when said main tubulars are in sealing
9 engagement.

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1 ~~28~~ The connection of claim ~~27~~, wherein:

2 said locking member further comprises at least one collet initially mounted in a groove in
3 said second main tubular,

4 said second main tubular insertable into a seal bore in said first main tubular;

5 said first main tubular further comprising a collet groove into which said collet enters and
6 becomes trapped by said second main tubular.

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1 ~~29~~ The connection of claim ~~28~~, wherein:

2 said second main tubular can move relative to said first main tubular with said collet locked
3 in said collet groove;

4 said main tubulars, upon such relative motion, selectively sealingly lock to each other by
5 virtue of a lock mechanism located in said seal bore.

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1 ~~30~~ The connection of claim ~~24~~, further comprising:
2 a receptacle forming the terminus of one of said first and second auxiliary conduits and a
3 male end forming the terminus of the other of said auxiliary conduits, said male end comprising a
4 seal such that when inserted into said receptacle, a leak free connection on the control line is formed.

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1 ~~31~~ The connection of claim ~~30~~, further comprising:
2 an alignment device mounted to both said main tubulars such that relative rotation occurs on
3 axial advancement of said second main tubular toward said first main tubular, whereupon said male
4 end becomes aligned with said receptacle for sealing therewith upon further axial advancement of
5 said main tubular members toward each other.

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1 ~~32~~ The connection of claim ~~31~~, further comprising:
2 a seal bore in said first main tubular:
3 said second tubular member, when advanced into said seal bore, engages a lock mechanism
4 therein to selectively hold said main tubulars to each other.

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1 ~~33~~ The connection of claim ~~32~~, further comprising:
2 said first and second auxiliary conduits are respectively mounted externally to said first and
3 second main tubulars;
4 a housing to initially hold said second auxiliary conduit to said second main tubular so as to

5 permit said second main tubular to rotate relative to said first main tubular;
6 said housing retained to said second main tubular by at least one collet removably disposed
7 in a groove thereon;
8 said first main tubular comprising a collet groove, said collet entering said collet groove, after
9 said relative rotation between said main tubulars, and becoming trapped therein by said second main
10 tubular to secure said housing to said first main tubular.

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1 ~~34.~~ The connection of claim ~~21~~, further comprising:

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2 a u-shaped said first auxiliary conduit which has two ends secured to said first main tubular
3 and at least two said second auxiliary conduits on said second main tubular such that, when said
4 main tubulars are connected, a u-shaped control line can extend from the surface of a well to the
5 bottom hole assembly and back up.

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1 ~~35.~~ The connection of claim ~~34~~, further comprising:

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2 a fiber optic cable mounted in said auxiliary conduits.

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1 ~~36.~~ A method of completing a well, comprising:

2 locating a down hole assembly and a lower portion of at least one control line down hole;
3 running in a tubing string and at least one upper portion of an auxiliary control line connected
4 to it:

5 joining down hole, the tubing string to the down hole assembly while also connecting said
6 upper portion of said auxiliary control line to said lower portion thereof.

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- 1 ~~37~~ The method of claim ~~36~~, further comprising:
- 2 aligning said upper and lower portions of said control line by virtue of advancing said tubing
- 3 string toward said down hole assembly which causes relative rotation of said tubing string with
- 4 respect to said down hole assembly.

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- 1 ~~38~~ The method of claim ~~38~~, further comprising:
- 2 inserting the end of the tubing string sealingly into a seal bore in the down hole assembly;
- 3 locking the tubing string in the seal bore with said upper and lower portions of said control
- 4 line sealingly connected as a result of said inserting.

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- 1 ~~39~~ The method of claim ~~38~~, further comprising:
- 2 mounting said upper portion of said auxiliary control line to a housing selectively connected
- 3 to said tubing string;
- 4 releasing the connection of said housing to said tubing string as a result of advancement into
- 5 said seal bore by said tubing string;
- 6 trapping said housing to said down hole assembly with said tubing string while said upper
- 7 and lower portions of said control line are sealingly engaged to each other.

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- 1 ~~40~~ The method of claim ~~39~~, further comprising:
- 2 using a collet to initially hold said housing to said tubing string;

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